REMARKS

Claims 1-11 and 13 are pending in the above-identified application. Claim 12 was previously canceled. Claims 1 and 8 have been amended by way of the present amendment. Reconsideration is respectfully requested.

In the outstanding Office Action, claims I-2, 5-6, 8, 11 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,717,892 (Sheu et al.) in view of U.S. Publication No. 2001/0014062 (Roh); claims 1, 3, 6-8, 10-11, 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2004/0136282 (Chen) in view of Roh; claims 4 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sheu et al. in view Roh and U.S. Patent No. 6,603,717 (Kawada et al). Reconsideration is respectfully requested.

35 U.S.C. § 103 Claim Rejections

Claims 1-2, 5-6, 8, 11 and 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sheu et al. in view of Roh. Reconsideration is respectfully requested.

Claim 1 was amended to clarify the invention. In particular, claim 1 has been amended to recite:

> driving a sledge of the optical disk drive by selecting either the first sledge driving signal or the second sledge driving signal; and
>
> connecting either the first sledge driving signal or the second sledge driving signal to the sledge through a switch,
>
> wherein the second sledge driving signal intermittently drives the sledge to perform error compensation.

Claim 8 was similarly amended. That is, as shown in **FIG. 1**, the original specification and figures discloses a microprocessor **14** can select the error signals **TEO**, **CEO**, the first sledge driving signal **FMO** or their combination for processing, in which a first function **22** that can be

executed to generate a second sledge driving signal **C1** based on the magnitude(s) of the selected signal(s), and in addition, a second function **23** incorporated in the microprocessor **14** can be

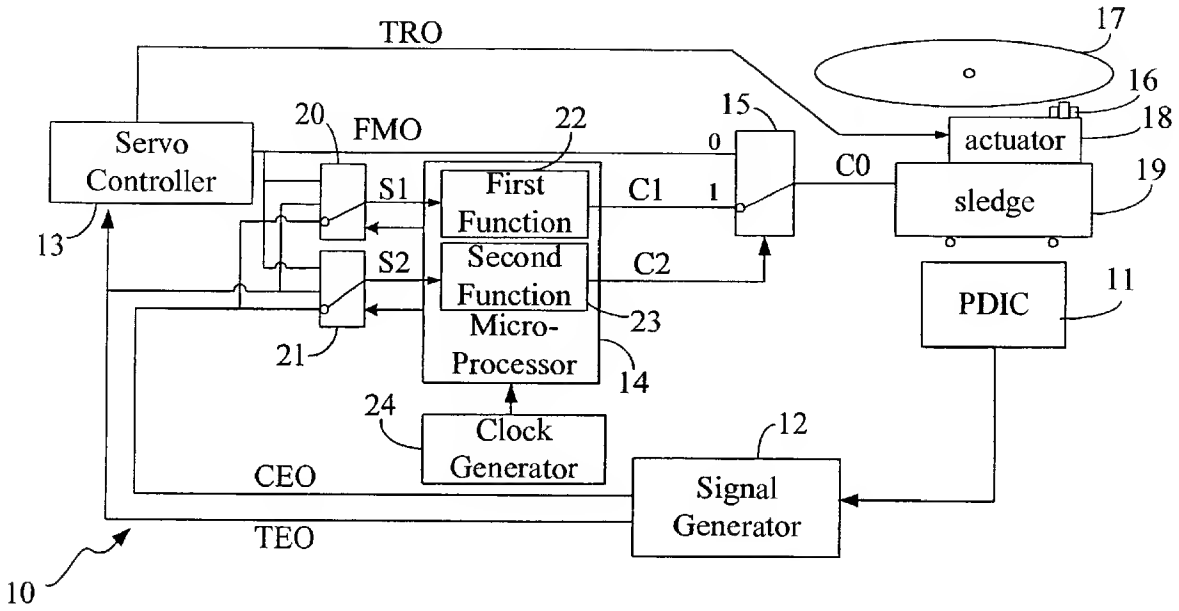


FIG. 1

executed based on the signal(s) selected from the group of the error signals **TEO**, **CEO**, the first sledge driving signal **FMO** and their combination, while the selected one(s) may not be the same as the signal(s) selected by the first function **22**, so as to output a control signal **C2** for controlling the switch **15**. That is, as is clearly shown in **FIG. 1** above, *the driving signal of the sledge **C0** is fed from switch **15** and results from the selection of a first and the second sledge driving signals **FMO** and **C1**, respectively, under control of signal **C2***. That is, according to the present application and **FIG. 1**, the driving signal of the sledge **C0** is connected *to either the first sledge drive signal **FMO** or the second sledge driving signal **C1*** through the switch **15**. That is, two sledge driving signals **FMO**, **C1** *do not drive* the sledge **19** *concurrently* and *are not connected* to the sledge **19** *concurrently*.

Sheu et al. discloses an optical disk drive for accessing data stored on a compact disc has a housing, a sled sliding inside the housing, a driving device for driving the sled, an actuator installed on the sled, a servo device for providing a push force to drive the actuator, a control

circuitry for controlling operations of the optical disk drive, an adaptive compensator, and an error signal generation circuit.[1] In particular, as shown in **FIG. 5**, Sheu et al. discloses a simplified diagram of the control system of the optical disk drive **60** which has a light source **76** and a sensor **78** installed on the sled **68** that are optically coupled with the actuator **72**, wherein a portion of reflected light is provided to the sled **68** for reading data stored on the optical disk **64** and another portion of it is incident to the sensor **78**.

Further, as is clearly shown in **FIG. 5** below, Sheu et al. discloses that in order to control or drive the sled **68** and the actuator **72** to lock the position of the track **96** correctly, the control circuitry **88** *adds:* (1) a signal from a compensation device **98**; and (2) a signal from an adaptive compensator **100** to provide *a single signal for driving the sled 68* through a driving device **70** (emphasis added).

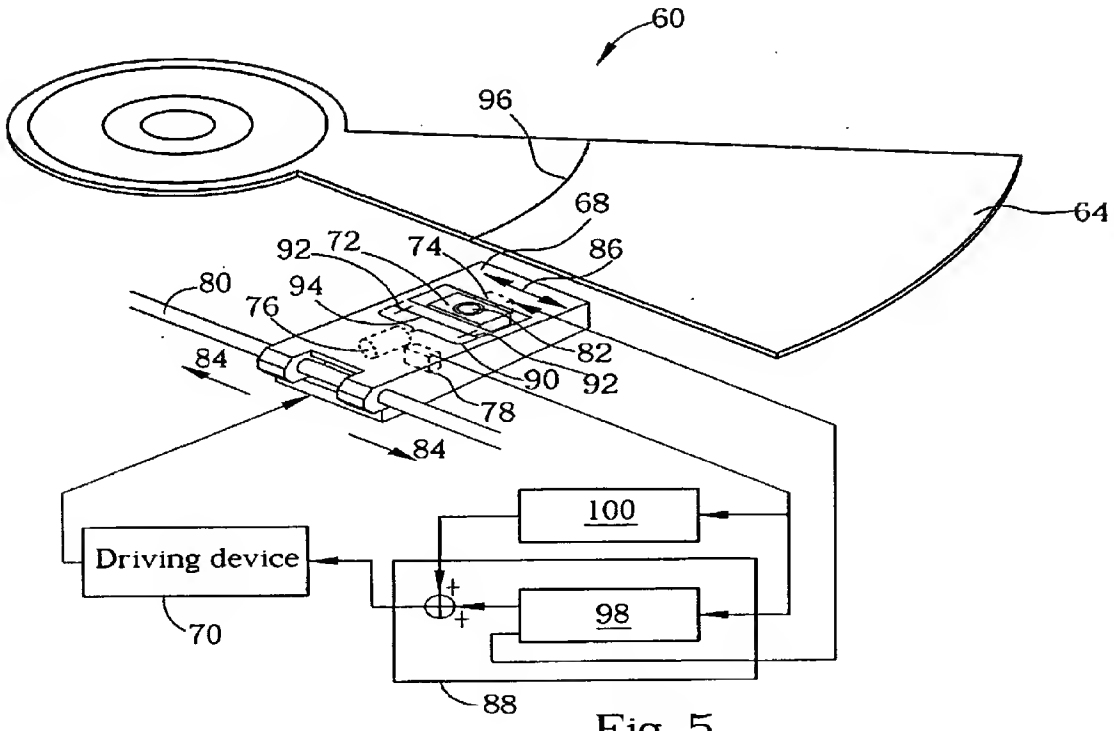


Fig. 5

[1] Sheu et al. at ABSTRACT.

However, Sheu et al. nowhere discloses as amended claim 1 recites:

> driving a sledge of the optical disk drive *by selecting either the first sledge driving signal or the second sledge driving signal; and*
>
> *connecting either the first sledge driving signal or the second sledge driving signal to the sledge through a switch,*
>
> wherein the second sledge driving signal intermittently drives the sledge to perform error compensation (emphasis added).

Claim 8 has been similarly amended. That is, as shown in **FIG. 5** above, Sheu et al. discloses two signals *are added* together to provide a driving signal for the sled. In contrast to the claimed invention, Sheu et al. nowhere discloses: "driving a sledge of the optical disk drive by *selecting either the first sledge driving signal or the second sledge driving signal.*" That is, the output of the driving device **70** disclosed by Sheu et al. is the *sum of two signals* and *not* a driving signal that is "*either* the first sledge driving signal *or* the second sledge driving signal," as recited in claim 1 and similarly in claim 8.

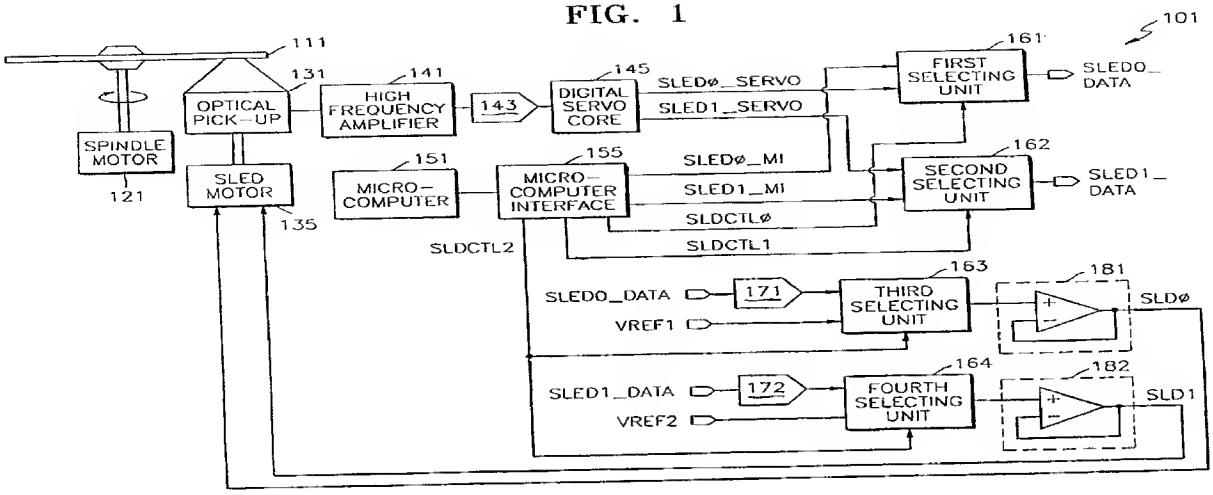
Further, Sheu et al. nowhere discloses, as the amended claim 1 recites: "connecting either the first sledge driving signal or the second sledge driving signal to the sledge through a switch." In fact, Sheu et al., as shown in **FIG. 5** above discloses a "driving device" **(70)** and not the recited "switch" **(15)** of claims 1 and 8 connects the sum of two signals to the sled. Therefore, in consideration of the above discussion, it is respectfully submitted that Sheu et al. does not disclose the claimed invention.

In addition, the outstanding Office Action acknowledges other deficiencies in Sheu et al. and attempts to overcome these deficiencies by combining Roh with Sheu et al. However, Roh cannot be combined with Sheu et al. to overcome all of the deficiencies, as discussed below.

Roh discloses an optical disc system for efficiently controlling a sled motor is provided.[2] In particular, as shown in **FIG. 1**, Roh discloses a first buffer **181** and a second buffer **182** that

[2] Roh at ABSTRACT.

FIG. 1



*first **SLD0** and second **SLD1** sled motor control signals are concurrently provided to the sled motor **135** through an IC circuit apparatus for driving the sled motor **135*** (emphasis added).]).

However, Sheu et al. nowhere discloses as amended claim 1 recites:

> driving a sledge of the optical disk drive *by selecting either the first sledge driving signal or the second sledge driving signal; and*
>
> *connecting either the first sledge driving signal or the second sledge driving signal to the sledge through a switch,*
>
> wherein the second sledge driving signal intermittently drives the sledge to perform error compensation (emphasis added).

Claim 8 has been similarly amended. That is, in contrast to the claimed invention and as shown in **FIG. 1** of Roh, the sled motor **135** both sledge driving signals (i.e., **SLD0**, **SLD1**) are concurrently provided and *directly connected* to the sledge motor **135**. In contrast to Roh, in the claimed invention recites: "either the first sledge driving signal or the second sledge driving signal to the sledge *through a switch*" (emphasis added). Thus, Roh cannot overcome all of the deficiencies of Sheu et al.

Further, **MPEP Section 2114** entitled: "A PRIOR ART DEVICE CAN PERFORM ALL THE FUNCTIONS OF THE APPARATUS CLAIM AND STILL NOT ANTICIPATE THE CLAIM," states:

> [E]ven if the prior art device performs all the functions recited in the claim, *the prior art cannot anticipate the claim if there is any structural difference* (emphasis added).

In particular, though Roh discloses selecting units **161, 162, 163, 164**, it is respectfully submitted that neither Sheu et al. nor Roh disclose the structure or function of the claimed invention that recites: "selecting either the first sledge driving signal or the second sledge driving signal." In fact, the selecting units **163** and **164** provide both **SLD0** and **SLD1**, respectively to the sled motor **135** concurrently. It is respectfully submitted that this structure nowhere anticipate that of the claimed invention.

Further, Roh nowhere discloses either of the two sledge driving signals **SLD0, SLD1,** being related to error compensation. In contrast to Roh, dependent claim 6 recites: "the second sledge driving signal is proportional to that of the error signal or the first sledge driving signal." Moreover, in contrast to Roh, dependent claim 11 recites: "the error signal further comprises and error signal between an actuator and the sledge of the optical disk drive." Therefore, it is respectfully submitted that neither Sheu et al. nor Roh, whether taken alone or in combination, disclose, suggest or make obvious the claimed invention and that claim 1 and claim 8, and claims dependent thereon, patentably distinguish thereovoer.

Claims 4 and 9 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sheu et al. in view of Roh and Kawada et al. Reconsideration is respectfully requested.

Claims 4 and claim 9 are ultimately dependent upon claim 1 and claim 8, respectively. As discussed above, neither Sheu et al. nor Roh disclose all of the limitation of claim 1 and claim 8. Thus, at least for the same reasons discussed above, neither Sheu et al. nor Roh disclose all of the limitation claim 4 and claim 9.

In addition, the outstanding Office Action acknowledges other deficiencies in Sheu et al. and Roh and attempts to overcome these deficiencies by combining Kawada et al. with Sheu et

al. and Roh. However, Kawada et al. cannot overcome all of the deficiencies of Sheu et al. and Roh, as discussed below.

Kawada et al. discloses an optical disk reproducing device that controls movement of the focus point of laser beams, which is irrelevant to error compensation for an optical disk drive.[3]

However, Kawada et al. nowhere discloses as amended claim 1 recites:

> driving a sledge of the optical disk drive *by selecting either the first sledge driving signal or the second sledge driving signal; and*
>
> *connecting either the first sledge driving signal or the second sledge driving signal to the sledge through a switch,*
>
> wherein the second sledge driving signal intermittently drives the sledge to perform error compensation (emphasis added).

In addition, claim 8 has been similarly amended. Therefore, it is respectfully submitted that none of Sheu et al., Roh or Kawada et al. whether taken alone or in combination, disclose, suggest or make obvious the claimed invention and that claim 4 and claim 9, and claims dependent thereon, patentably distinguish thereovoer.

Claims 1, 3, 6-8, 10-11, 13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of Roh.

Chen discloses a method for calibrating a center error offset in an optical drive and a control system capable of calibrating the center error offset.[4] In particular, Chen discloses: "[t]he control signal generator **22** generates plural sets of different tracking coil control signals so as to control the tracking coil to drive the lens set **12** to different positions."[5] Further, Chen discloses: "when the system calibrates the center error offset, the switch **S1** connects the tracking coil control signal **TRO_1** output from the control signal generator **22** to the power drive **20**, and the

[3] Kawada et al. at ABSTRACT.
[4] Chen at ABSTRACT.
[5] *Id.* at **FIG. 4**; and paragraph **[0022],** lines 12-14.

switch **S2** is off to prevent the output of the sled motor servo control unit **17** from being outputted to the power drive **20**."[6]

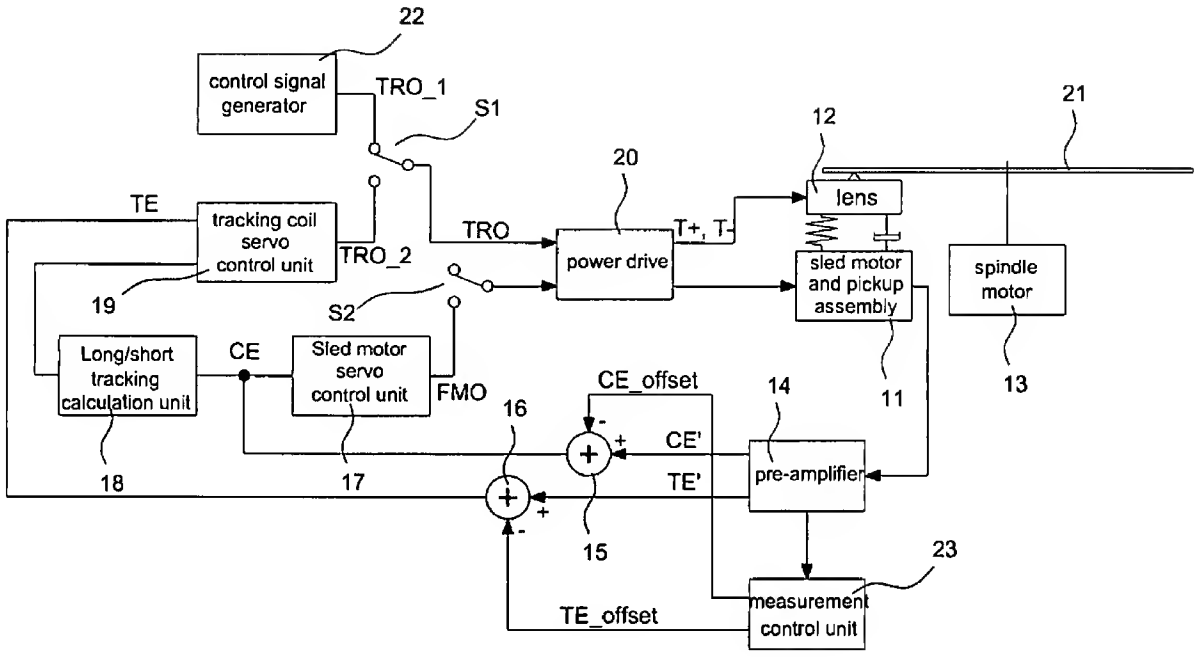


FIG. 4

In particular, as shown in **FIG. 4**, when the system calibrates the center error offset, the switch **S1** connects the tracking coil control signal **TRO_1** output from the control signal generator **22** to the power device **20**, and the switch **S2** is off to prevent the output of the sled motor servo control unit **17** from being outputted to the power device **20**. Thus, when the system disclosed by Chen calibrates the center error offset, the sled is *not controlled* by the sled motor servo control unit **17** and is held at a fixed position (emphasis added). Accordingly, in **FIG. 4** of Chen, **TRO_1** and **TRO_2** selectively drive the lens set **12**. The lens set 12 of Chen corresponds to actuator **18** of **FIG. 1** of the present application, and thus, only one signal **FMO** drives the sledge **11**.

[6] *Id.* at **FIG. 4**; and paragraph **[0022],** lines 21-29.

In consideration of the discussion above, it is respectfully submitted that the outstanding Office Action's indication that reference numerals **18** and **19** generate a second sledge driving signal is incorrect. Instead, reference **18** and **19** of Chen generate a track coil control signal **TRO_2** or **TRO**, and does *not* generate: "a first- sledge driving signal" or "a- second sledge driving signal," as recited in claim 1. In addition, it is respectfully submitted that the outstanding Office Action nowhere acknowledges or corrects this mistake. A correction of this characterization is respectfully requested in the next Office Action.

Moreover, Chen nowhere discloses as amended claim 1 recites:

> driving a sledge of the optical disk drive *by selecting either the first sledge driving signal or the second sledge driving signal*; *and*
>
> *connecting either the first sledge driving signal or the second sledge driving signal to the sledge through a switch,*
>
> wherein the second sledge driving signal intermittently drives the sledge to perform error compensation (emphasis added).

In addition, claim 8 has been similarly amended. Thus, it is respectfully submitted that Chen does not disclose the invention of amended independent claim 1 or claim 8.

Further, the outstanding Office Action acknowledges other deficiencies in Chen and attempts to overcome these deficiencies by combining Roh with Chen. However, as discussed above with regards to the previous rejection, Roh cannot overcome all of the deficiencies of the applied art. That is, Roh nowhere discloses as amended claim 1 recites:

> driving a sledge of the optical disk drive *by selecting either the first sledge driving signal or the second sledge driving signal*; *and*
>
> *connecting either the first sledge driving signal or the second sledge driving signal to the sledge through a switch,*
>
> wherein the second sledge driving signal intermittently drives the sledge to perform error compensation (emphasis added).

Claim 8 was similarly amended. Therefore, it is respectfully submitted that neither Chen nor

Roh, whether taken alone or in combination, disclose, suggest or make obvious the claimed invention and that amended claims 1 and 8, and claims dependent thereon, patentably distinguish thereovoer.

Conclusion

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 22171-00020-US1 from which the undersigned is authorized to draw.

Dated: July 18, 2008

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